

Fig. 7 is a graph of phosphorylation as a function of time showing the separation of three different specific kinase reporter substrates from a sample of the contents of a *Xenopus laevis* oocyte 46' that had been previously microinjected to contain ~1 \times M Fl-sPKC, ~330 nM Fl-sPKA, and ~10 nM Fl-scdc2K. Fl-sPKA, a specific reporter for protein kinase A (PKA) activity has the sequence FL-Lys-Arg-Arg-Glu-Ile-Leu-Ser-Arg-Arg-Pro-Ser-Tyr-Arg (sequence ID NO:1), and was derived from the CREB protein. Fl-scdc2K, a specific reporter for cdc2 kinase (originally identified genetically as cell division cycle mutant 2) has the sequence Fl-Gly-Gly-Gly-Arg-Ser-Pro-Gly-Arg-Arg-Arg-Lys (sequence ID NO:2), and comprises a consensus phosphorylation site derived from several proteins. The underlined serine residues are the sites of phosphorylation. The peptides were synthesized and labeled with fluorescein as described for Fl-sPKC, except that Fl-scdc2K was labeled with the mixed 5- and 6-isomers of carboxyfluorescein succinimidyl ester (100-200 mg/ml, Molecular Probes, Eugene OR); thus, Fl-scdc2K consisted of two isomeric forms. A peak 162 and a peak 172 were identified by their migration times as observed when injected into oocytes 46' singly (not shown). The first doublet, peaks 162 and 164, corresponds to two isomers of either phosphorylated or nonphosphorylated Fl-scdc2K. The second doublet, peaks 166 and 168, corresponds to two isomers of the other form of Fl-scdc2K. One peak 170 represents nonphosphorylated Fl-sPKC, and one peak 172 represents nonphosphorylated Fl-sPKA.

Kindly enter the attached "Sequence Listing" into the specification of the above-referenced application and delete any "Sequence Listing" that may already exist within the specification.